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INTENSIVE CULTURAL RESOURCES SURVEY

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FOURCHE CREEK FLOOD CONTROL PROJECT PULASKI COUNTY, ARKANSAS

BY

W.J. BENNETT, JR. AND AUBRA LANE LEE

ARCHEOLOGICAL ASSESSMENTS REPORT NO. 60

SUBMITTED TO

LITTLE ROCK DISTRICT, CORPS OF ENGINEERS

1986

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An Intensive Cultural Resources Survey,
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to the
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An Intensive Cultural Resources Survey,
Proposed Spoil Deposition Areas,
Fourche Creek Flood Control Project,
Pulaski County, Arkansas

INTRODUCTION

Project Authorization

The US Army Engineer District, Little Rock has proposed to undertake a variety of drainage improvement activities within the Fourche Creek Flood Control Project Area, Pulaski County, Arkansas. As part of its responsibility for the management of such cultural resources which might be located in the project area the US Army Engineer District, Little Rock, contracted with Archeological Assessments, Inc., Nashville, Arkansas, in 1984, (Contract No. DACW Order No. 0001) to perform an intensive cultural resources survey with site evaluation within those locations to be impacted by these activities. Subsequent to these examinations additional locations for the deposition of spoil were identified. This effort consisted of a cultural resources reconnaissance for these areas. This action was taken under the authority of and in compliance with the National Historic Preservation Act of 1980 (Public Law 96-515). Work was authorized by Contract Number DACW03-86-D-0068, Order No. 0004.

Project Background and Project Area Location

The flood improvement activities which compose this project are to be located along three streams; Fourche Creek, Rock Creek, and Grassy Flat Creek which together constitute the project area. The spoil deposition areas with which this effort is concerned are restricted to the Fourche Creek portion of this area (Figure 1). Figure 2 gives the location of the particular deposition areas. Deposition Area 3 had been examined in the initial investigations and was not included as a part of this effort.

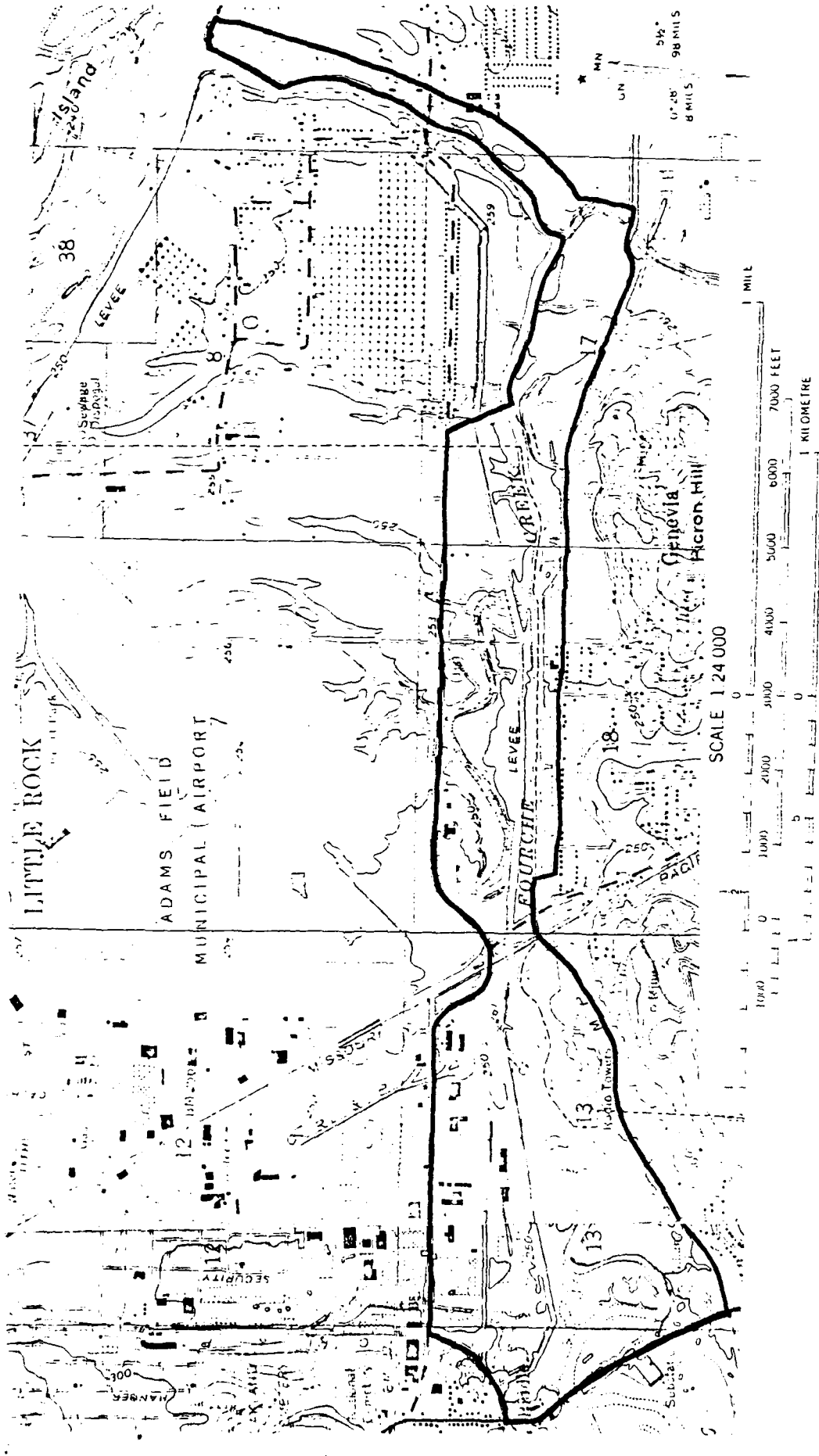


Figure 1. Project Area Vicinity Map. (Little Rock and Sweet Home
USGS 7.5 minute Quadrangles)

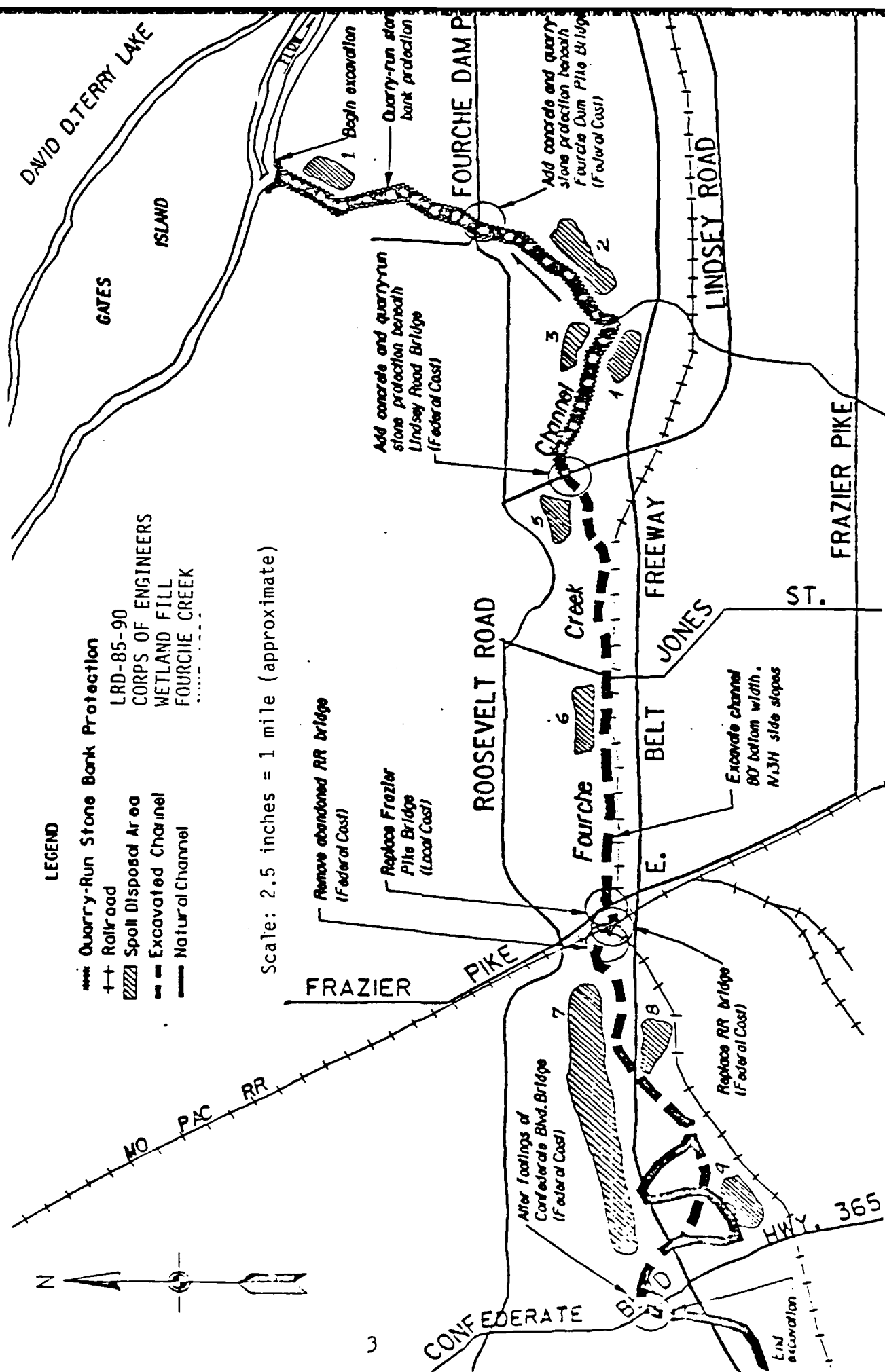


Figure 2. Location of Spoil Disposal Areas

Project Goals and Orientation

The stated goal of this effort was to locate, identify and evaluate those cultural resources in the project area which might be affected by the project.

To this end an intensive cultural resources survey was designed which included a background and literature search, a geomorphological analysis of the project area, field examination of the area, and site evaluation. Since this was essentially a continuation of an earlier effort it was possible to draw upon the results of the prior investigations in establishing the culture historical context and the geomorphic setting without repeating the investigations themselves (Smith 1984; Bennett, Swanda, and Watkins 1985). However, since not all readers of this report will have immediate access to this earlier work some sections of the earlier study, particularly the culture historical background and geomorphological analysis, are given again in this report.

ARCHEOLOGICAL CONTEXT

Records Search

Prior to the original examination of the area a comprehensive inquiry of sources of documentary information regarding previously recorded sites in the area was undertaken. The sources consulted were the records of the Arkansas Archeological Survey, Fayetteville, Arkansas; the list of historic properties on record in the Arkansas Historic Preservation Program, Little Rock; the cultural resource files of the US Army Engineer District, Little Rock; and the information concerning nineteenth century historic sites shown on the General Land Office maps on file with the Arkansas History Commission, Little Rock, and surveyor's notes on file with the Arkansas State Land Office, Little Rock.

Discussion regarding cultural resources within the project area were also held with Burney McClurkan and John Miller, archeologists for the Arkansas State Highway and Transportation Department, as well as with Leslie C. Stewart-Abernathy, Jr., Arkansas Archeological Survey, Pine Bluff Station.

This extensive effort was not repeated for the present project. In this instance our review of information on file with the US Army Engineer District, Little Rock, and available via computer access with the Office of the State Archeologist determined that no archeological sites were in the proposed project areas. A detailed examination of the files of the Arkansas Historic Program was undertaken both by officials of that agency and by Audra Lee, Archeological Assessments, Inc. The results of this search were negative.

Regional Archeological Context

The following discussion is taken from Bennett, Swanda, and Watkins (1985: 9 - 20).

The project area is situated in the Middle Arkansas River Valley as defined in Davis (1982). This is perhaps the least well understood region in Arkansas. As of yet the Arkansas Archeological Survey has not yet developed Study Units, research problems, or approaches for this area.

The principal sources of information about this area comes from earlier, general studies (Harrington 1924; Moorehead 1931; Scholtz and Hoffman 1968), work done to the west in the Ozark Reservoir area (Hoffman et al 1977), Dardanelle Reservoir (Greengo 1957; Caldwell 1958), and the Conway Water Supply Project (Martin and Jones 1978; Santeford and Martin 1980), and work done to the east at Toltec (Rolingson 1982). The excavations at the Tom's Brook Shelter (Bartlett 1963) produced important stratigraphic data for the understanding of the Archaic period generally. Michael Hoffman's study of

materials from the Kinkead-Mainard site are important for the late prehistoric period (Hoffman 1977). From these disparate studies it is possible to form some very general ideas about the archeological sequences in the region.

It seems certain that the broad general culture-historical sequence used to interpret past human occupations elsewhere in Arkansas is appropriate to this region: Paleo-Indian, Archaic, Woodland, Mississippian, and Historic.

There is no evidence at present which suggests an occupation of the region earlier than the Paleo-Indian period (12,000 ? - 8,000 B. C.). Paleo-Indian occupation is customarily defined by the presence of the highly diagnostic fluted projectile points (Clovis and Folsom). Investigations outside Arkansas have suggested that this period was characterized by highly nomadic groups of hunters whose primary subsistence focus was on the very large, now extinct, Pleistocene fauna. While isolated occurrences of the diagnostic items from this period are reported in Arkansas none are known for our area.

Researchers are now in general agreement that the Paleo-Indian period ended with a slow transition from the highly nomadic groups focused on Pleistocene fauna to the more restricted nomadic groups adapted to Holocene conditions. It is within this transitional position that the Dalton culture is most often interpreted. This widespread culture is again recognized most often by the presence of the distinctive Dalton projectile points. However, recent research has identified several other elements of the tool kit (Morse and Goodyear 1973).

This transition is thought to have stabilized into a very long period (ca. 8,000/7,000 B. C. - 1,000/500 B. C.) in which the region is occupied by nomadic hunter/gather groups organized into a variety of band societies. This is usually referred to as the Archaic Period and is often divided into three temporal divisions: Early, Middle, and Late. Details regarding this very long period are largely wanting but some general propositions have recently gained favor. Many researchers consider it very likely that the Middle Archaic which is on the same general time level as the Altithermal saw a marked decrease in population tied to the region's increased hot and dry climate. A return to a more moderate and moist climate in the Late Archaic allowed an increase in regional population.

Definite time-markers, primarily dart point types, are relatively few and generally not well-secured. However, present researchers tend to agree that the larger side and corner notched points such as the Big Sandy and Johnson points belong early in the Archaic sequence, followed by the basally notched Calf Creek points most often thought to belong to the Middle Archaic period, and the Bulverde point which seems to occur at the transition between Middle and Late Archaic. The Williams point seems to be a particularly good marker for the Late Archaic.

The Woodland Period (ca. 500 B. C. - A. D. 900/1,000) is marked by the introduction of ceramics and the bow and arrow. Chipped stone hoes are also a part of the material culture. The most characteristic dart point type of this period is the contracting stemmed Gary point. This period marks a greatly increased sedentary life-style and what seems clearly to be a more complex social organization.

In western and southwestern Arkansas the Woodland manifestation is generally referred to as the Fourche Maline (Schambach 1982) which appears to be identical with the Gober Complex identified in the Ozark Reservoir (Hoffman 1977).

In eastern Arkansas the early Woodland manifestation contains a number of the same cultural traits but has been classified under the terms Baytown and Barnes. The Toltec Mounds, perhaps the most spectacular prehistoric remains in Arkansas, date to the end of the Woodland period (A. D. 500 - 900) and have been interpreted as belonging to a cultural group only recently defined by Martha Rolingson as the Plum Bayou culture (Rolingson 1982).

The Mississippian Period (A. D. 900/1,000 - 1541) occupation is largely sedentary and seems to be focused on the cultivation of crops, primarily maize, squash, and beans. In western Arkansas this cultural manifestation is interpreted as Caddoan which is distinct from the Mississippian groups identified for the Lower Mississippi River Valley in eastern Arkansas. Very little is known of Mississippian groups in the vicinity of Little Rock until the very end of this period when the Arkansas River Valley near Little Rock was occupied by the Quapaw. Several very large Quapaw sites have been identified in this vicinity (Harrington 1924; Hoffman 1977).

The beginning of the Historic Period is generally put at the entrance of Europeans into the area during the De Soto expedition of 1541. However, the beginning of sustained European presence in the area does not occur for another century. The establishing of the first Arkansas Post in 1686 (Martin 1978) marked the beginning of the exploration and exploitation of the Arkansas River Valley, first by the French, later by the Spanish, and finally by the United States.

The French quickly established trading relations with the Indians as a means of strengthening their hold on the interior of the North American continent. "Voyageurs" extended trade networks into every major river system, and the Arkansas River offered them almost unlimited opportunities (Dickinson 1982).

They were interested in trade, however, and not in settlements, so that the impact they left on the area was limited to the names of the places they visited. In 1792, Bernard de la Harpe was exploring the Arkansas River when he noticed a tremendous rock, the first he had seen on his trip up the river. He gave it the name "La Rocher Francase." A mile or so downstream, however, was another, smaller outcropping which soon came to be known as the

"point of rocks" or the "little rock," and became a landmark for early settlers.

As a result of the French and Indian War, all of Louisiana west of the Mississippi River was ceded to Spain in 1762. The Spanish continued and expanded the trade the French had established with the Indians. A few attempts were to attract settlers, mainly through the issue of land grants. Although some of the grants were in the area of Little Rock, no settlement was established.

The Louisiana Territory, which had been returned to France, was purchased by the United States in 1803. Arkansas Post continued to be the major settlement, and the base for traders working up the river, but a settlement was also growing in the area of Cadron (Smith 1974; Nuttall 1821; Ross 1957).

When Arkansas became a territory in July 1819, it was widely known that Arkansas Post was to be only a temporary capital. As the Legislature debated where to locate the permanent capital, only two places received serious consideration - the "point of rocks", and the small settlement at Cadron. The selection was complicated by the controversy surrounding the title to lands at Little Rock.

Two groups of speculators were claiming title to the land (Richards 1969). One group based its claim on a pre-emption claim titled by William Lewis in 1812. The other group based its claim on four New Madrid certificates (issued by the United States government to relieve settlers who had lost land in the New Madrid earthquakes of 1811-1812) which were designated for use in the vicinity of Little Rock. Each group lobbied to have the capital moved to Little Rock in the hopes that they would increase the value of their land, if they won the suit over the titles.

The Superior Court of the Territory ruled in favor of the Lewis pre-emption claim in June 1821, and the territorial capital was moved to Little Rock in October of the same year. The result was rapid growth in the Little Rock area. From 12 or 13 residents in 1820, the town grew to 430 in 1830, and to 726 in 1836.

During the Civil War Little Rock experienced the difficulties of being the Confederate Capital of Arkansas and then occupation by the Union forces. Following the Civil War, and on into the early 20th century, the Little Rock area again experienced a period of growth (Coulter 1982) which has continued sporadically to the present.

Archeological Context in the Project Area

The background and literature search determined that other archeological investigations had been conducted within the general vicinity of the project

area but not within the project area itself. Three such investigations are described below.

A general assessment of the archeological resources present within the Fourche Creek Basin was conducted in 1972 by the Arkansas Archeological Survey for the Little Rock Corps of Engineers (House 1972). This assessment combined both local interviews with avocational archeologists and field investigations to produce information on 28 archeological site locations within the Fourche Creek Basin. Information was compiled on sites in the area ranging in age from the Dalton period (8000 B. C.) to the early Euro-American historic period. Sites were located on a variety of topographic situations which included hilltops, terraces, and natural levees.

In 1980 the Arkansas Archeological Survey conducted an archeological survey of the proposed airport expansion at the Adams Field Municipal Airport in Little Rock (Lafferty and Otinger 1980). This research consisted of field investigations in an area located about 1 mile north of the Fourche Creek Project boundaries. A total of 12 archeological sites were recorded in this effort. Recovered materials included artifacts dating to both prehistoric and historic time periods. Sites were located on a terrace edge/backswamp situation produced by the Arkansas River.

Between November 1980 and July 1981, the Arkansas Archeological Survey conducted a field reconnaissance and a program of testing at selected archeological sites located within the Fourche Sewerage Facilities project area (Cande 1982). The boundaries of the Fourche Sewerage Facilities project parallels portions and in one instance directly crosses the boundaries of the Fourche Creek Project. This study produced data on 35 archeological sites of which 31 were previously unrecorded. These data were strong indications that the Fourche Creek area contained a relatively high density of small sites with shallow deposits. The sites discussed in this study were generally located on low levees and terraces adjacent to local drainages.

These investigations indicate that, in general terms, at least the vicinity of the project area had been occupied during all of the major periods discussed above.

Previously Recorded Prehistoric Sites

The investigations described above noted that while there was a relatively high density of sites within the larger Fourche Creek drainage only two prehistoric sites, 3PU24 and 3PU45, were recorded in the near vicinity of the project area.

Site 3PU24 was first reported to the Arkansas Archeological Survey in 1968 by a local collector. It was visited by that agency in 1972 during the

Fourche Basin Survey (House 1972). The materials collected from this site suggested a long prehistoric occupation that was concentrated during the Woodland (Fourche Maline) and/or Baytown time period. The site measured 100 x 40 meters in extent and was located on a terrace edge adjacent to Fourche Creek.

The site was visited again in 1975 by the Arkansas Highway Department and the Arkansas Archeological Survey in connection with the proposed construction of Interstate 440. The results of a series of shovel tests suggested to the investigators that most of the archeological deposit at the site had been disturbed by farming and the judgment was made that further investigations at the site would not produce significant additional data.

In 1981 the site was revisited by the Arkansas Archeological Survey for a third time in connection with the Fourche Sewerage Facilities Project (Cande 1982). At that time it was discovered that most of the site had been completely destroyed by construction associated with Interstate 440. It was believed that a small portion of the site could still be intact at the northern terrace edge. However, no archeological materials were found in shovel tests.

Site 3PU45 was first reported by John House (House 1972) and was thought to represent a possible Fourche Maline/Baytown occupation. Robert Cande revisited the site's location in 1981 but due to restricted ground visibility caused by heavy vegetation he was not able to relocate the site (Cande 1982).

Historical Context of the Project Area

Research to date by Beverly Watkins indicates that because the lands in the project area were swamp and overflow lands, they were not claimed as quickly as the more desirable lands nearby. Some of the land was claimed in 1836 by speculators, including Chester Ashley; most of the rest was claimed in the 1840's and 1850s (Pulaski County nd). Lands along Fourche Bayou itself tended to be claimed before those along Rock Creek and Grassy Flat Creek presumably because the focus of settlement and commerce was along the Arkansas River.

Although the project area along the Fourche was too low for occupation, there were settlements nearby. The Fletcher and Vaughnan plantations were on the Arkansas River on either side of the Fourche. By 1838 there was a settlement southwest of Little Rock on the Fourche that was large enough to have its own school (Moffatt 1953). Early roads connecting Little Rock with Pine Bluff and Washington, and the Southwest Trail into Texas all crossed the creek, but the water was shallow enough that ferries were not needed.

The unhealthiness of the swamp and problems with drainage and flooding led Dr. William Byrd Power to develop a series of plans for damming Fourche Bayou in 1843. He believed that controlling communication between the bayou and the Arkansas River would improve drainage in the east end of the city. The building of Fourche Dam also provided a roadway through the swamp and became a major route along the south bank of the Arkansas River (Ross 1969).

Inaccuracies in the early surveys necessitated a resurvey of much of the state in the 1850s. The maps done at that time show that in 1857 there were still no improved properties along Fourche Bayou other than the Dam and the fields where the bayou entered the Arkansas River (House Document 150: 1900). Rock Creek was crossed by several roads. A mill, identified as Gibbon's Mills, is shown in the project area on Rock Creek. This was probably a small grist mill that lasted only a few years.

Fourche Bayou and Fourche Dam played a small part in the Civil War battles that ended with the capture of Little Rock. As the Union Army marched on Little Rock from the east, Major General Frederick Steele decided that the best way to approach the city was to split his force. He ordered the cavalry under Brig. General John W. Davidson to cross to the south side of the Arkansas River near Terry's Ferry about five miles from Fourche Bayou, while the infantry stayed on the north side of the river. The Confederate Army under Major General Sterling Price had prepared defensive works at Bayou Meto and on the north side of the Arkansas River across from Little Rock, but when Davidson managed to get his force to the south side of the river, these fortifications became useless. Confederate cavalry commanded by Brig. General John S. Marmaduke rushed to Fourche Bayou to fight a delaying action to cover the Confederate retreat from Little Rock, but the Union forces prevailed, marching across Fourche Dam and into the city late on the afternoon of September 10, 1863.

Following the Civil War, and on into the early 20th century, the Little Rock area again experienced a period of growth (Coulter 1982). The town spread to the west and southwest, staying away from the low lands and malarial swamps of Fourche Bayou and close to the new constructed railroads (Richards 1969). Land along Rock Creek and Grassy Flat Creek not claimed earlier was now settled under the provisions of the Homestead Act of 1868, which provided for low cost land to actual residents. The improvements made to qualify for land under this act would have been made on the hills overlooking the creeks, rather than in the project areas. The only improvement on Fourche Bayou in these years was an iron bridge built by Pulaski County where the Little Rock to Pine Bluff road crossed the bayou (Dugan 1980).

Problems continued over the unhealthiness of the swamp as well as with drainage and flooding. In the 1880s the new State Lunatic Asylum was discharging its sewer into a small creek which emptied into Fourche Bayou until local residents complained (Henker 1978). The low lands along the bayou contributed to drainage problems in the east end of the city, and

those areas were especially susceptible to flooding. The record flooding of 1927 devastated the area, leaving behind as much as 18 inches of sand (Clay 1979; Daniel 1977). Heavy floods in more recent years have highlighted the continuing need for attention to Fourche Bayou and its tributaries.

Historic Period Sites

Several historic sites dating to the mid-nineteenth century are shown on the General Land Office maps in the general vicinity of the larger project area. However, the General Land Office survey plat of 1857 for the Fourche Creek portion of the project area listed three agricultural fields and one dam site across Fourche Creek within the project boundaries. No house locations or other associated structures were recorded. No historic period features were observed in the western portion of the Fourche Creek segment.

As indicated above, there are no standing structures on record at the Arkansas Historic Preservation Office that are located within the project boundaries. No sites listed on, or as eligible for, the National Register of Historic Places are located within the project area.

GEOMORPHOLOGICAL CONTEXT

The following geomorphological analysis is taken nearly verbatim from Smith (1984) and also appears in Bennett, Swanda, and Watkins (1985: 21 - 24).

General Geomorphic Setting

Fourche Creek is an example of a well developed meandering stream which has been substantially influenced by the geomorphic activity of the Arkansas River, to which it is tributary. Meandering through a well developed floodplain, Fourche Creek flows from the Fourche Mountains region of the Ouachita Mountains province onto the alluvial valley of the Arkansas River approximately three miles upstream from its point of confluence with the Arkansas (Figure 3). Throughout its lower reach, below its confluence with Rock Creek, Fourche Creek meanders through a relatively wide flat alluvial valley, bounded on the southeast by Granite Mountain, and on the northwest by several low hills within the city of Little Rock.

Holocene geomorphic activity of the Arkansas River in the vicinity of Little Rock has strongly influenced the geomorphic development of the lower Fourche Creek. The Arkansas River appears to be (and probably has been for the last several thousand years) actively migrating laterally while it aggrades vertically. The impact of lateral migration by the Arkansas River on Fourche Creek is substantial yet variable. Before 1920 the Arkansas River migrated away from the mouth of Fourche Creek which was extended probably causing aggradation in the lower Fourche channel. However, since at least 1920, the Arkansas has been migrating south-westward toward the present mouth of Fourche Creek, resulting in the cutting off of approximately three miles of lower Fourche Creek. This natural shortening of Fourche Creek will have the effect of steepening the gradient of Fourche Creek, causing channel bed erosion.

Aggradation of the Arkansas River floodplain has apparently been substantial during the last several thousand years, as evidenced by the thick natural levee deposits near the present mouth of Fourche Creek. Aggradation in the Arkansas River floodplain has resulted in aggradation of the lower Fourche Creek bed and backwater flooding on the lower reach of Fourche Creek. Extensive backwater flooding by the Arkansas River into lower Fourche Creek Valley is the most probable factor responsible for the existence of extensive lowland areas between the confluence of Fourche and Rock Creeks and the Frazier Pike bridge.

Geomorphic Features and Landforms

The landscape of lower Fourche Creek Valley has undoubtedly changed significantly during the last several thousand years. As the Arkansas River has aggraded, the lower Fourche Creek channel has probably evolved from an

actively meandering stream with a relatively well drained floodplain to a slowly meandering stream with a poorly drained (swampy) floodplain bounded by segments of a low well drained terrace.

The floodplain of Fourche Creek within the project area (mile 0.0 to mile 4.45) exhibits geomorphic features and landforms typical of a stream meandering in its alluvial valley. However, the Fourche Creek channel in the project area may actually be examined in four geographically discrete reaches (Figure 3). From point A (mile 4.45) to point B (Fraizer Pike Bridge), Fourche Creek is freely meandering through its own alluvium which is draped by backwater flood deposits (massive clays) which probably reach a thickness of three feet. Within the project right-of-way (50 feet from to bank on both banks) the primary landform which occurs is a low flat floodplain consisting of Fourche Creek point bar alluvium veneered by backwater clays. However at four locations, Fourche Creek meanders against what appears to be a low terrace which probably extends above the modern floodplain by 8 to 12 feet. About halfway through the reach A-B, Fourche Creek meanders against an abandoned channel segment (previously a small oxbow lake) created by lateral migration.

The natural channel reach B-C of lower Fourche Creek would be very similar to reach A-B but, Fourche Creek has been straightened in this reach, with the old natural channel of Fourche Creek still visible to the north. Throughout reach B-C, the channel and right-of-way are located in Fourche Creek point bar alluvium veneered by backwater clay.

Fourche Creek re-enters its natural channel at point C. The reach C-D is similar to reach A-B, in that most of the right-of-way is backwater clay over Fourche Creek point bar deposits. However, in reach C-D, Fourche Creek has re-worked older alluvial deposits of the Arkansas River. At two locations Fourche Creek channel encounters the low terrace (correlative to the low terrace in reach A-B).

From point D to point E (mile 0.0) Fourche Creek flows through Arkansas River point bar alluvium which is veneered by natural levee deposits from the Arkansas River. Natural levee deposits from the Arkansas River found in the banks of Fourche Creek channel increase in thickness from D (probably several feet thick) to E (probably 10 to 12 feet thick).

Archeological Significance of Geomorphic Features and Landforms

The lower Fourche Creek floodplain in the project right-of-way is primarily one of a low, poorly drained clayey surface adjacent to a channel which has meandered laterally during the last several thousand years. This floodplain surface has most likely been characterized by slow burial by backwater (clay) deposits during times of flood on the Arkansas River and Fourche Creek, accompanied by local erosion and deposition from channel migration. Deposition from backwater flooding has most likely resulted in shallow

burial of archeological materials older than several hundred years. Archeological materials may be buried by as much as 10-12 feet in the lower reach of segment D-E. Where the low terrace is encountered, the probability of surficial occurrence of archeological materials should be greatly increased.

Setting of the Disposal Areas

The following observations were made by Bennett and are not part of the original analysis.

Table 1 gives a summary description of the mapped landforms within which and on which the various spoil disposal areas are located.

Table 1. Landforms and Disposal Areas

Disposal Area	Landforms
1	This area is located on point bar deposits of the Arkansas River which have been covered by recent natural levee deposits from the Arkansas River. (Reach D - E)
2	This area is located on point bar deposits of the Arkansas River which have been covered by recent natural levee deposits from the Arkansas River. (Reach D - E)
4	This area is located on point bar deposits of the Arkansas River which have been covered by recent natural levee deposits from the Arkansas River. (Reach D - E)
5	This area is located partially on an older terrace formation and on backwater clay over Fourche Creek point bar deposits. (Reach C - D)
6	This area is located in an area which has been very heavily impacted by the construction of a modern levee. Originally, most of this area was Fourche Creek floodplain and adjacent older terrace. Modification of the area has made it impossible to distinguish these two landforms in the area. (Reach B - C)

Table 1. Landforms and Disposal Areas
(continued)

Disposal Area	Landforms
7	This large area covers both an older terrace and areas of the Fourche Creek floodplain. Recent construction has made it impossible to determine the exact boundary between these two in this area. (Reach A - B)
8	This area includes some of what was once most probably the edge of an older terrace structure and portions of the Fourche Creek floodplain. (Reach A - B)
9	This area is located principally on an older terrace adjacent to the Fourche Creek floodplain. However, construction related to the Gillam School and other projects have altered the surface considerably. (Reach A - B)

AREAS EXAMINED

Field Work Procedures

Field work was conducted in these areas by Aubra Lee from 28 July through 1 August, 1986. Each disposal area was considered as a distinct Survey Unit and observations were recorded regarding the environment, field conditions, and methods used to examine each area. These observations are presented in summary form in the pages which follow.

In general, each area was examined using a pedestrian survey which walked transects spaced at approximately 20 - 30m intervals with shovel testing at approximately 20 - 30m intervals. Shovel tests were usually 30cm in diameter and dug to a maximum of 50cm deep.

The geomorphological analysis had indicated that the terrace structures adjacent to the modern floodplain of Fourche Creek were likely locations for prehistoric sites. These areas were examined with particular care and more intensive shovel testing.

General Field Conditions

Field conditions varied from area to area. However, some form of ground disturbance was observed in each unit. This ranged from active cultivation in the easternmost units to the construction of large earthworks such as the Fourche Creek levee and the construction of Gillam School.

Ground visibility also varied considerably from area to area. However, those areas nearest the present course of Fourche Creek were uniformly overgrown with dense vegetation. Such areas were subjected to intense shovel testing.

Sites Encountered

No cultural resources, with the exception of very recent trash and debris, were encountered within any of the proposed disposal areas.

It is thought likely that prehistoric sites may have once existed on the terrace surfaces in this area. Sites 3PU24 and 3PU45 are evidence for this belief. However, these areas have all been so disturbed by numerous and large construction efforts that very little, if any, of the original surfaces are left. Should there have been sites within the active floodplain of Fourche Creek, it is most likely that these have either been scoured away by the creek, buried under the clay backswamp deposits from the Arkansas River, or removed through modern construction activity.

SURVEY UNIT: 1 - Disposal Area 1

QUAD SHEET: Sweet Home, AR.

TERRAIN: Survey unit is totally contained within a cultivated field on the west bank of Fourche Creek at its junction with the Arkansas River (Gates Island). The field had been plowed but not planted.

VEGETATION: Consists of mixed hardwoods with a dense understory of grasses, vines, and briars along bankline of Fourche Creek.

SOIL DESCRIPTION(S): 0-28cm, light brown very fine sandy loam/silt plowzone; 28-55+cm, medium brown very fine sandy loam/silt.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 100%

SPECIAL HINDERANCES TO SITE LOCATION: Part of high topography paralleling bank of creek has been eroded away.

SPECIAL OBSERVATIONS: Recent trash dump burning was observed near access road and consisted of cinder block fragments, glass, metal fragments, etc. Also observed road surface gravel as far as 130 meters south of northern unit boundary along with an old barge on river bank.

SURVEY STRATEGY: Parallel transects 30m apart and shovel testing every 30m.

SURVEYOR(S): Lee

DATE: 7/29/86

SURVEY UNIT: 2 - Disposal Area 2

QUAD SHEET: Sweet Home, AR.

TERRAIN: Survey unit is contained within fallow pasture and cultivated field (soybean or cotton). Located on south bank of Fourche Creek in Sec. 1 and 17. Survey unit is oriented southwest/northeast and cuts across a topographic high (in pasture).

VEGETATION: Consists of mixed hardwoods with a dense understory of grass, young trees, vines, and some briars along bankline of Fourche Creek..

SOIL DESCRIPTION(S): Field profile: 0-24cm, very fine sandy loam/silt plowzone; 24-50+cm, medium brown silt. Pasture profile: 0-5cm, very fine sandy loam/silt root zone; 5-17cm, very fine sandy loam/silt, light brown; 17-48+cm, medium brown silt.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: Surface visibility in pasture is 0-15% and surface visibility in cultivated field is 90%.

SPECIAL HINDERANCES TO SITE LOCATION: Grasses in pasture range from waist high to over head height and cultivated plants range from 10-20cm in height.

SPECIAL OBSERVATIONS: Large buildings located on northeast corner of survey unit have been removed. Topographic high has been deflated and flattened. I-440 runs south of Survey unit between 200-300m.

SURVEY STRATEGY: Transects in pasture were spaced 30m apart with a shovel test interval of 25 meters. Transects in cultivated field expanded to 50m apart with shovel testing every 50m.

SURVEYOR(S): Lee

DATE: 7/29/86

SURVEY UNIT: 3 - Disposal Area 4

QUAD SHEET: Sweet Home, AR.

TERRAIN: Survey unit is contained within 2 cultivated fields separated by an intermittent tributary of Fourche Creek. Only a very small portion of unit (less than 5%) is located west of intermittent drainage.

VEGETATION: Both fields contain young plants of either cotton or soybeans. Bankline has mixed hardwood interspersed with clearer areas covered in thick grass, cane, vines, briars, and young trees.

SOIL DESCRIPTION(S): Profile 1: 0-31cm, very fine sandy loam/silt plowzone; 31-50cm, medium brown silt. Profile 2: 0-7cm, very fine sandy loam/silt humus or root zone.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 80%

SPECIAL HINDERANCES TO SITE LOCATION: none

SPECIAL OBSERVATIONS: Large high area shown on map has been deflated by constant cultivation. A small area of the south Fourche Creek bankline has not been recently impacted by cultivation.

SURVEY STRATEGY: Transects followed row orientation (east-west) with shovel tests placed between rows. Transects were 30m apart with shovel tests placed every 50m along transect.

SURVEYOR(S): Lee

DATE: 7/29/86

SURVEY UNIT: 4 - Disposal Area 5

QUAD SHEET: Sweet Home, AR.

TERRAIN: Survey unit is located in a previously cleared area that is now covered in waist to shoulder high grass, vines, and briars. The upper canopy is relegated to the junction of the terrace and floodplain of Fourche Creek, the bankline of the creek, and a small area around an intermittent drainage at the west end of the Survey Unit. The northern boundary of the unit parallels the containment levee to help control Fourche Creek flooding.

VEGETATION: Consists of grass, vines, and briars.

SOIL DESCRIPTION(S): Terrace profile in vegetated area is: 0-19cm, light gray silt; 19-26cm, mottled light gray/yellow red silt; 26-47+cm, yellow red silt. Terrace profile in area where trees are present is modified by a gray root zone from 0-6cm.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 0-2%

SPECIAL HINDERANCES TO SITE LOCATION: High grass, vines, and briars.

SPECIAL OBSERVATIONS: Two areas had very recent trash scatters on them, but were not recorded because they are less than 5 years old. Colluvial silt deposits were located at the extreme northern edge of the floodplain at the junction of the terrace.

SURVEY STRATEGY: Transects were oriented from east to west and vice versa. Shovel test interval of 30m with a transect interval of 30m.

SURVEYOR(S): Lee

DATE: 7/30/86

SURVEY UNIT: 5 - Disposal Area 6

QUAD SHEET: Sweet Home, AR.

TERRAIN: Survey unit is located in a partially cleared, partially vegetated area that contains the previously mentioned man-made containment levee, part of the Fourche Creek terrace, and portions of the Fourche Creek floodplain.

VEGETATION: Consists of mixed hardwoods with a very thick understory of climbing vines, young trees, briars, and different grasses.

SOIL DESCRIPTION(S): Profile 1: 0-6cm, dark gray silt root zone; 6-21cm, gray silt; 21-46+cm, yellow-red silt. Profile 2: 0-17cm, light gray very fine sandy loam/silt with occasional rocks; 17-31cm, gray silt; 31-52+cm, yellow-red silt.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 0-2%

SPECIAL HINDERANCES TO SITE LOCATION: The man-made levee has severely impacted the middle portion of this unit. Land clearing and construction has also impacted a large portion of the terrace which is located south of the natural channel of Fourche Creek.

SPECIAL OBSERVATIONS: The creek has been channelized in this area, cutting off the naturally, sinuous stream channel. The channelized area is located approximately 300-350 meters south of the natural channel at its closest point. The terrace profile is similar to that in Survey Unit 4, but dessication cracks were observed in clear areas and upon the levee (silt). Isolated areas were found to contain a mixture of sandy loam and silt.

SURVEY STRATEGY: Transects were oriented from east to west and vice versa. Shovel test interval of 30m with a transect interval of 30m.

SURVEYOR(S): Lee

DATE: 7/30/86

SURVEY UNIT: 6 - Disposal Area 7

QUAD SHEET: Little Rock, AR., Sweet Home, AR.

TERRAIN: Eastern 1/3 of the unit consisted of both cleared and vegetated areas. The northern limits of the western 2/3 of the Survey Unit consists of a man-made containment levee for Fourche Creek and some parts of the industrial park. Two topographic highs (marked 250 feet amsl of 1975, Sweet Home, AR., orthophoto quad and 1970 Sweet Home Quad) mark the southern boundary in the middle 1/3 of the Survey Unit. The northern boundary extends just north of the containment levee.

VEGETATION: Consists of mixed hardwoods and a very thick understory of climbing vines, young trees and shrubs, briars, and grasses.

SOIL DESCRIPTION(S): Profile 1: 0-6cm, dark gray silt root zone; 6-21cm, clay silt; 21-46+cm, yellow-red silt. Profile 2: 0-17cm, light gray very fine sandy loam/silt with occasional rocks; 17-31cm, gray silt; 31-52+cm, yellow-red silt.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 0-2%

SPECIAL HINDERANCES TO SITE LOCATION: Eastern 1/3 has been severely impacted by containment levee construction, railroad construction, and commercial usage as part of an industrial park. The understory was very hard to penetrate in the middle 1/3 of the Survey Unit.

SPECIAL OBSERVATIONS: Bulldozer work was observed outside of Survey Unit. Rock and some asphalt from road construction was observed on the surface on the north side of levee. Industrial park impact in the middle 1/3 of the SURVEY UNIT is relatively minimal, but some areas are relatively sparser than previously encountered.

SURVEY STRATEGY: Transects were from east to west and vice versa. Transect interval was 30m with a shovel test interval of 30m.

SURVEYOR(S): Lee

DATE: 7/30,31/86

SURVEY UNIT: 7 - Disposal Area 8

QUAD SHEET: Sweet Home, AR.

TERRAIN: Unit is located south of Fourche Creek and north of the Missouri Pacific Railroad line. Unit is located east of partially demolished radio towers and west of a U-shaped pond. Area is highly dissected by intermittent drainages. Landform is a terrace which is dissected.

VEGETATION: Consists of mixed hardwoods.

SOIL DESCRIPTION(S): 0-6cm, light gray silt root zone; 6-19cm, light gray silt; 19-33cm, mottled light gray/yellow red silt; 33-52+cm, yellow red silt.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 0-2%

SPECIAL HINDERANCES TO SITE LOCATION: Heavy understory, stream erosion and recent trash.

SPECIAL OBSERVATIONS: The recent trash debris mentioned was observed during field examination.

SURVEY STRATEGY: Transects were oriented from west to east and vice versa. Intervals between transects were 30m with a shovel test interval of 30m.

SURVEYOR(S): Lee

DATE: 7/31/86

SURVEY UNIT: 8 - Disposal Area 9

QUAD SHEET: Little Rock, AR., Sweet Home, AR.

TERRAIN: Survey unit is located south of Fourche Creek at Gillam School. Unit is bound on its south side by the Missouri Pacific Railroad line. Terrace has been extensively modified by construction of Gillam School. Area from school, south to Missouri Pacific tracks, is cleared of vegetation except for a thin band of trees.

VEGETATION: Consists of Oak, Pecan, Sweetgum, and Elm trees with the understory being relatively dense and containing climbing vines, briars, young trees and shrubs, and poison oak/ivy.

SOIL DESCRIPTION(S): Dry profile 1: 0-5cm, light gray silt root zone; 5-19cm, light gray silt; 19-27cm, mottled light gray/yellow red silt; 27-43+cm, yellow/red silt. Wet profile: 0-6cm, gray silt root zone; 6-11cm, dark gray silt; 11-17cm, light gray; 17-25+cm, mottled light gray/yellow red silt.

SITES RECORDED: 0

ISOLATED FINDS: 0

GENERAL VISIBILITY: 0-2%

SPECIAL HINDERANCES TO SITE LOCATION: Area has been graded level and some areas have been filled in with the excavated materials

SPECIAL OBSERVATIONS: Most of unit is comprised by Gillam School complex.

SURVEY STRATEGY: Transect for area were oriented from west to east and vice versa. Used railroad tracks to keep orientation on southside. Transect intervals were 30m apart with a shovel test interval of 30m.

SURVEYOR(S): Lee

DATE: 7/31/86 - 8/1/86

RECOMMENDATIONS

No further archeological investigations are recommended for these areas.

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